

WHAT IS CLAIMED IS:

1 1. A system for facilitating data management on a secure token,
2 comprising:
3 a client having a plurality of applications residing thereon; and
4 a secure token having a storage architecture, wherein the storage architecture
5 includes:
6 a directory and one or more attributes associated with the directory,
7 wherein the one or more attributes associated with the directory are used to control access to
8 the directory by the plurality of applications,
9 one or more cell groups under the directory, each cell group having
10 one or more associated attributes, wherein the one or more attributes associated with a cell
11 group are used to control access to that cell group by the plurality of applications, and
12 one or more cells under each cell group, each cell having one or more
13 associated attributes, wherein the one or more attributes associated with a cell are used to
14 control access to that cell by the plurality of applications.

1 2. The system of claim 1 wherein the one or more attributes associated
2 with the directory permit access to the directory by one application and deny access to the
3 directory to another application.

1 3. The system of claim 1 wherein the one or more attributes associated
2 with the cell group permit access to that cell group by one application and deny access to that
3 cell group to another application.

1 4. The system of claim 1 wherein the one or more attributes associated
2 with the cell permit access to that cell by one application and deny access to that cell to
3 another application.

1 5. The system of claim 1 wherein one or more additional cell groups are
2 added to the directory subsequent to issuance of the secure token to a token holder.

1 6. The system of claim 1 wherein ownership of one of the one or more
2 cell groups is determined subsequent to issuance of the secure token to a token holder.

1 7. The system of claim 1 wherein ownership of one of the one or more
2 cell groups is modified subsequent to issuance of the secure token to a token holder.

1 8. The system of claim 1 wherein one or more additional cells are added
2 to a cell group subsequent to issuance of the secure token to a token holder.

1 9. The system of claim 1 wherein the one or more attributes associated
2 with the directory are modified in terms of permitting or denying access to the directory by
3 the plurality of applications.

1 10. The system of claim 1 wherein the one or more attributes associated
2 with a cell group are modified in terms of permitting or denying access to that cell group by
3 the plurality of applications.

1 11. The system of claim 1 wherein the one or more attributes associated
2 with a cell are modified in terms of permitting or denying access to that cell by the plurality
3 of applications.

1 12. The system of claim 1 wherein the one or more attributes associated
2 with a cell further control operations on contents of that cell by the plurality of applications.

1 13. The system of claim 12 wherein the one or more attributes associated
2 with the cell permit a first set of operations on the contents of that cell by a first application;
3 wherein the one or more attributes associated with the cell permit a second set
4 of operations on the contents of that cell by a second application; and
5 wherein the first set of operations is different from the second set of
6 operations.

1 14. The system of claim 1 wherein the one or more attributes associated
2 with the directory permit a first application to access the directory after a first access
3 condition is satisfied;
4 wherein the one or more attributes associated with the directory permit a
5 second application to access the directory after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 15. The system of claim 1 wherein the one or more attributes associated
2 with the cell group permit a first application to access that cell group after a first access
3 condition is satisfied;

4 wherein the one or more attributes associated with the cell group permit a
5 second application to access that cell group after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 16. The system of claim 1 wherein the one or more attributes associated
2 with the cell permit a first application to access that cell after a first access condition is
3 satisfied;

4 wherein the one or more attributes associated with the cell permit a second
5 application to access that cell after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 17. The system of claim 1 wherein the secure token is a smart card.

1 18. The system of claim 17 wherein the smart card is an open platform
2 smart card.

1 19. The system of claim 17 wherein the smart card is a static or native
2 smart card.

1 20. A secure token comprising:
2 a directory and one or more attributes associated with the directory,
3 wherein the one or more attributes associated with the directory are used to control access to
4 the directory by a plurality of applications,

5 one or more cell groups under the directory, each cell group having
6 one or more associated attributes, wherein the one or more attributes associated with a cell
7 group are used to control access to that cell group by the plurality of applications, and

8 one or more cells under each cell group, each cell having one or more
9 associated attributes, wherein the one or more attributes associated with a cell are used to
10 control access to that cell by the plurality of applications.

1 21. The secure token of claim 20 wherein the one or more attributes
2 associated with the directory permit access to the directory by one application and deny
3 access to the directory to another application.

1 22. The secure token of claim 20 wherein the one or more attributes
2 associated with the cell group permit access to that cell group by one application and deny
3 access to that cell group to another application.

1 23. The secure token of claim 20 wherein the one or more attributes
2 associated with the cell permit access to that cell by one application and deny access to that
3 cell to another application.

1 24. The secure token of claim 20 wherein one or more additional cell
2 groups are added to the directory subsequent to issuance of the secure token to a token
3 holder.

1 25. The secure token of claim 20 wherein ownership of one of the one or
2 more cell groups is determined subsequent to issuance of the secure token to a token holder.

1 26. The secure token of claim 20 wherein ownership of one of the one or
2 more cell groups is modified subsequent to issuance of the secure token to a token holder.

1 27. The secure token of claim 20 wherein one or more additional cells are
2 added to a cell group subsequent to issuance of the secure token to a token holder.

1 28. The secure token of claim 20 wherein the one or more attributes
2 associated with the directory are modified in terms of permitting or denying access to the
3 directory by the plurality of applications.

1 29. The secure token of claim 20 wherein the one or more attributes
2 associated with a cell group are modified in terms of permitting or denying access to that cell
3 group by the plurality of applications.

1 30. The secure token of claim 20 wherein the one or more attributes
2 associated with a cell are modified in terms of permitting or denying access to that cell by the
3 plurality of applications.

1 31. The secure token of claim 20 wherein the one or more attributes
2 associated with a cell further control operations on contents of that cell by the plurality of
3 applications.

1 32. The secure token of claim 31 wherein the one or more attributes
2 associated with the cell permit a first set of operations on the contents of that cell by a first
3 application;
4 wherein the one or more attributes associated with the cell permit a second set
5 of operations on the contents of that cell by a second application; and
6 wherein the first set of operations is different from the second set of
7 operations.

1 33. The secure token of claim 20 wherein the one or more attributes
2 associated with the directory permit a first application to access the directory after a first
3 access condition is satisfied;
4 wherein the one or more attributes associated with the directory permit a
5 second application to access the directory after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 34. The secure token of claim 20 wherein the one or more attributes
2 associated with the cell group permit a first application to access that cell group after a first
3 access condition is satisfied;
4 wherein the one or more attributes associated with the cell group permit a
5 second application to access that cell group after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 35. The secure token of claim 20 wherein the one or more attributes
2 associated with the cell permit a first application to access that cell after a first access
3 condition is satisfied;
4 wherein the one or more attributes associated with the cell permit a second
5 application to access that cell after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 36. The secure token of claim 20 wherein the secure token is a smart card.

1 37. The secure token of claim 36 wherein the smart card is an open
2 platform smart card.

1 38. The secure token of claim 36 wherein the smart card is a static or
2 native smart card.

1 39. A method for facilitating data management on a secure token,
2 comprising:
3 providing a directory and one or more attributes associated with the
4 directory, wherein the one or more attributes associated with the directory are used to control
5 access to the directory by a plurality of applications,
6 providing one or more cell groups under the directory, each cell group
7 having one or more associated attributes, wherein the one or more attributes associated with a
8 cell group are used to control access to that cell group by the plurality of applications, and
9 providing one or more cells under each cell group, each cell having
10 one or more associated attributes, wherein the one or more attributes associated with a cell
11 are used to control access to that cell by the plurality of applications.

1 40. The method of claim 39 wherein the one or more attributes associated
2 with the directory permit access to the directory by one application and deny access to the
3 directory to another application.

1 41. The method of claim 39 wherein the one or more attributes associated
2 with the cell group permit access to that cell group by one application and deny access to that
3 cell group to another application.

1 42. The method of claim 39 wherein the one or more attributes associated
2 with the cell permit access to that cell by one application and deny access to that cell to
3 another application.

1 43. The method of claim 39 further comprising:
2 adding one or more additional cell groups to the directory subsequent to
3 issuance of the secure token to a token holder.

1 44. The method of claim 39 further comprising:
2 determining ownership of one of the one or more cell groups subsequent to
3 issuance of the secure token to a token holder.

1 45. The method of claim 39 further comprising:
2 modifying ownership of one of the one or more cell groups subsequent to
3 issuance of the secure token to a token holder.

1 46. The method of claim 39 further comprising:
2 adding one or more additional cells to a cell group subsequent to issuance of
3 the secure token to a token holder.

1 47. The method of claim 39 further comprising:
2 modifying the one or more attributes associated with the directory in terms of
3 permitting or denying access to the directory by the plurality of applications.

1 48. The method of claim 39 further comprising:
2 modifying the one or more attributes associated with a cell group in terms of
3 permitting or denying access to that cell group by the plurality of applications.

1 49. The method of claim 39 further comprising:
2 modifying the one or more attributes associated with a cell in terms of
3 permitting or denying access to that cell by the plurality of applications.

1 50. The method of claim 39 wherein the one or more attributes associated
2 with a cell further control operations on contents of that cell by the plurality of applications.

1 51. The method of claim 50 wherein the one or more attributes associated
2 with the cell permit a first set of operations on the contents of that cell by a first application;
3 wherein the one or more attributes associated with the cell permit a second set
4 of operations on the contents of that cell by a second application; and
5 wherein the first set of operations is different from the second set of
6 operations.

1 52. The method of claim 39 wherein the one or more attributes associated
2 with the directory permit a first application to access the directory after a first access
3 condition is satisfied;

4 wherein the one or more attributes associated with the directory permit a
5 second application to access the directory after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 53. The method of claim 39 wherein the one or more attributes associated
2 with the cell group permit a first application to access that cell group after a first access
3 condition is satisfied;

4 wherein the one or more attributes associated with the cell group permit a
5 second application to access that cell group after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 54. The method of claim 39 wherein the one or more attributes associated
2 with the cell permit a first application to access that cell after a first access condition is
3 satisfied;

4 wherein the one or more attributes associated with the cell permit a second
5 application to access that cell after a second access condition is satisfied; and
6 wherein the first access condition is different from the second access
7 condition.

1 55. The method of claim 39 wherein the secure token is a smart card.

1 56. The method of claim 55 wherein the smart card is an open platform
2 smart card.

1 57. The method of claim 55 wherein the smart card is a static or native
2 smart card.